



Review this document with your installer after installation and initial configuration. It will help you become familiar with your StorNext M440 system.

### Ask Your Installer

After your system is installed, ask the installer to show you:

- How to change passwords
- How to add users and roles
- The proper shutdown process
- How to reconfigure network settings
- The status LEDs and LCD panel
- How to locate your system serial number
- How to contact Quantum Support

### Product Overview

Quantum's StorNext M440 Metadata Appliance is an all-in-one appliance that combines the powerful file-sharing capabilities of StorNext with pre-configured hardware.

The system is powered by an HA pair of metadata controller (MDC) nodes configured for resiliency. The appliance comes in four models: M441D, M441Q, M445D SSD, and M445Q SSD. The M441D and M445D SSD features one dual-port 8 Gb Fibre Channel HBA. The M441Q and M445Q SSD features two dual-port 8 Gb Fibre Channel HBAs. An optional 10 GbE NIC is available for access to Lattus.

The M441 is available with HDDs only. The M445 is available with HDDs and SSDs. An optional metadata disk expansion kit can be installed for additional file systems and performance.

The MDC coordinates SAN file access across clients. Additionally, the standby MDC node can be used as a distributed data mover (DDM).

### Documentation

For M440 product documentation, go to [www.quantum.com/snmdcdocs](http://www.quantum.com/snmdcdocs).

Use the following documents:

- *StorNext M440 Hardware Guide* – Also available from the StorNext M440 GUI. Provides hardware-specific information.
- *StorNext M440 Site Planning Guide* – Provides information such as environmental requirements.
- *StorNext Users Guide* – Also available from the StorNext M440 GUI. Provides information on using and managing StorNext software.
- Additional StorNext software documentation, such as the *StorNext Licensing Guide*, is available from [www.quantum.com/sn5docs](http://www.quantum.com/sn5docs).

### Licensing

From the StorNext M440 GUI, go to **Configuration > Licenses** and review the licensed features. Note that you will need the serial number if you need to obtain additional features.

The following features are factory-installed on the system:

- **StorNext Failover (High Availability):** Provides the ability to configure and operate a redundant server that can quickly assume control of StorNext file systems in the event of software, hardware, and network failures on the primary server.
- **File System SAN Clients:** Includes 10 customer StorNext SAN clients for any supported OS. Additional licenses can be purchased separately.
- **Distributed Data Mover (DDM):** Includes one license for off-loading data movement from the StorNext M440 system.
- **Maintenance:** A maintenance license is associated with the expiration date of your current service contract, and is required to enable StorNext software upgrades.

Refer to the *StorNext Licensing* document for a description on the types of licenses and procedures for obtaining them. Some features that you can purchase separately include:

- **Distributed LAN Clients:** These allow you to connect StorNext clients over a LAN. LAN clients use a SAN Client as a Distributed LAN Server.
- **StorNext Storage Manager:** Allows you to archive files to tape or disk, up to specified capacity limit.

### Basic Operations

**Log on to GUI:** Log on as **admin**, with the default password (**password**). For security purposes, you should reset this password.

**Reset passwords:** Select **Tools > User Accounts**. Select the appropriate user, and enter a new password. Note and save the password.

**Add user accounts:** Select **Tools > User Accounts > New**. Select the access controls and roles you want the user to have.

**Power on and shut down the StorNext 440:** Refer to the *StorNext M440 Hardware Guide*, "Powering on the StorNext M440 System" and "Shutting Down the StorNext M440 System" sections.

**Monitor StorNext status, events, alarms and messages:** Refer to the "Service Menu Functions" section of the *StorNext User's Guide*.

- The StorNext M440 Home page provides status and capacity monitors for file systems, libraries, storage disks, and tape drives.
- Hardware component monitoring shows up-to-date information about the system board, network ports, and Fibre Channel ports for both MDCs, plus the storage arrays. (Refer to the *StorNext User's Guide*, "Hardware Status Report" section.)

**Edit the network configuration:** Select **Configuration > System**. Consult your network administrator prior to changing any information. (Refer to the *StorNext M440 Hardware Guide* or *StorNext User's Guide*.)

**Set up e-mail notifications:** Select **Configuration > Email Notifications > New**. (Refer to the *StorNext User's Guide*, "Step 8: Email Server" section.)

Refer to the *StorNext User's Guide* for more information on basic operations and tasks.

## Hardware

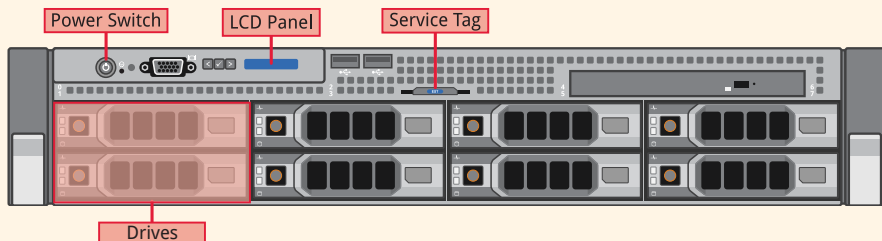
Identify the power switch, LCD panel, service tag, drives, and LEDs.

For hardware component details, refer to the *StorNext M440 Hardware Guide*, “Hardware Overview” section.

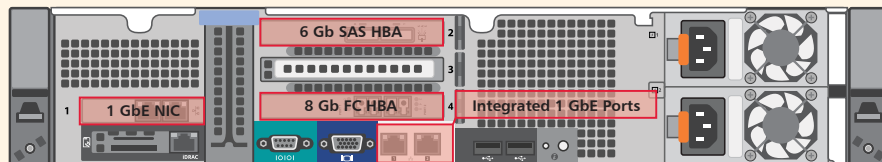
For details on cabling and network connectivity, refer to the *StorNext M440 Hardware Guide*, “StorNext M440 Connectivity” section.

**Note:** Array drive configuration differs with the M440 models.

### StorNext M440 MDC Node - Front View

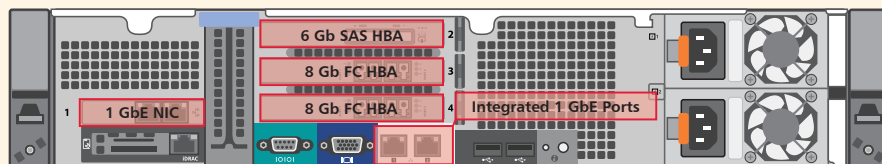


### StorNext M441D/M445D SSD MDC Node - Rear View\*

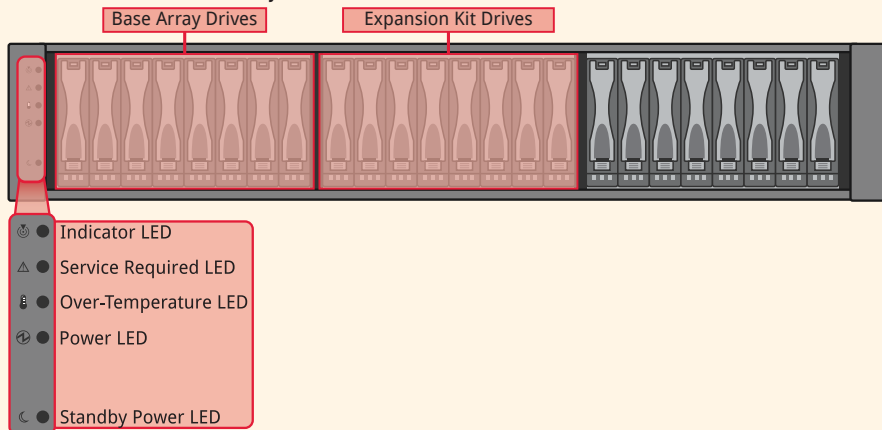


\*When configured for Lattus, PCIe slot 3 is occupied by a dual-port 10 GbE card

### StorNext M441Q/M445Q SSD MDC Node - Rear View



### StorNext M440 Metadata Array - Front View



## Troubleshooting

**Admin Alerts and Tickets** - Click the **Admin Alerts** and **Tickets** buttons, then follow the suggested actions. [Refer to the *StorNext User's Guide*, “The Tickets Function” section.]

**Health Checks** - To run various diagnostic health checks by category, select **Service > Health Check > Run Selected/Run All**.

**Status LEDs** - Refer to the *StorNext M440 Hardware Guide*, “Hardware Overview” section.

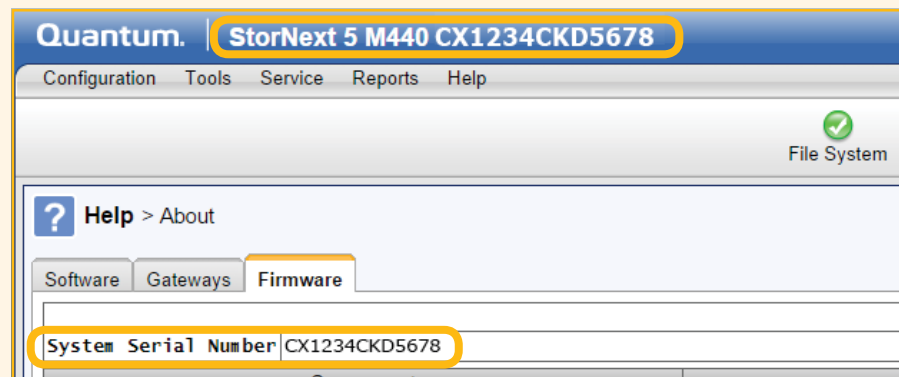
**LCD Panel** - The system's LCD panel provides system information, status and error messages to show when the M440 Node is operating correctly, and when it needs attention. Record any status codes and error messages displayed in the LCD panel. This information can help Quantum Technical Support troubleshoot problems.

## Getting Help

### Locating the System Serial Number

You will need to provide your system serial number for technical support. System serial numbers are alpha-numeric (example: CX1234CKD5678). Here's how to find them:

**On the front of the MDC Nodes:** Scrolling on the LCD panel on the front of each MDC node.



**From the top of the StorNext M440 GUI,** and by selecting **Help > About > Firmware**.

**On the back of the components:** System serial numbers are located in a plastic sleeve on the rear of each component.

### Capturing System State and DSET Logs for Technical Support

For instructions on how to capture system state logs and support bundles, refer to the “The Capture State Function” section of the *StorNext User's Guide*.

For instructions on how to capture DSET logs, refer to the “Capture DSET” section of the *StorNext User's Guide*.

### Contacting Quantum Support

You can contact Quantum Support in two ways:

- Access the Online Service Center by opening an Online Service Request at: [www.quantum.com/osr](http://www.quantum.com/osr)
- Call Tech Support. You can find a list of contact numbers for Tech Support at: <http://www.quantum.com/ServiceandSupport/Contacts/ProductSelect/Index.aspx>